

AMENDMENTS TO THE CLAIMS:

Please amend Claim 12 and add new Claims 22 and 23 as shown below.

1. (Canceled)
2. (Previously Presented) The optical pulse source of claim 11 wherein the feedback circuit adjusts the shape of pulses passing through the filter to produce RZ pulses.
3. (Previously Presented) The optical pulse source of claim 11 wherein the light source comprises a distributed feedback laser.
4. (Previously Presented) The optical pulse source of claim 11 wherein the Bragg grating is coupled to the source by polarization maintaining optical fiber.
5. (Previously Presented) The optical pulse source of claim 11 wherein the Bragg grating comprises a fiber Bragg grating stabilized by disposition in a controlled temperature environment.
6. (Previously Presented) The optical pulse source of claim 11 wherein the Bragg grating is tunable.

7-9 (Canceled)

10 (Previously Presented) The optical pulse source of claim 11 wherein the light source comprises a temperature adjustable distributed feedback laser and the feedback circuit comprises an electronic circuit responsive to the tapped signals for adjusting the temperature of the laser.

11 (Previously Presented) An optical pulse source to generate RZ pulses at a wavelength λ comprising:

a modulated light source for generating optical pulses of light over an optical spectrum including λ , the source modulated in power and frequency;

a Bragg grating having a filter response, the grating coupled to the light source and stabilized so that the filter response is over a range overlapping at least part of the optical spectrum of the source;

a tilted grating tap coupled to the light source and the Bragg grating for tapping a signal representative of the light supplied to the grating and a signal representative of the light reflected or transmitted by the grating; and,

a feedback circuit responsive to the tapped signals for adjusting the wavelength λ of the light source.

12. (Currently Amended) The optical pulse source of claim 11 wherein the ~~tilted grating tap~~ Bragg grating comprises a PM (polarization maintaining) fiber.

13. (Previously Presented) The optical pulse source of claim 11 wherein a wavelength response curve represents the optical transfer function of the grating and the wavelength λ of the light source is locked to an edge of the grating wavelength response curve.

14. (Previously Presented) An optical pulse source to generate RZ pulses at a wavelength λ comprising:

a modulated light source for generating optical pulses of light over an optical spectrum including λ , the source modulated in power and frequency;

a Bragg grating having a filter response, the grating coupled to the light source and stabilized so that the filter response is over a range overlapping at least part of the optical spectrum of the source;

a fused fiber PM coupler coupled to the light source and the Bragg grating for tapping a signal representative of the light supplied to the grating and a signal representative of the light reflected or transmitted by the grating; and,

a feedback circuit responsive to the tapped signals for adjusting the wavelength λ of the light source.

15. (Previously Presented) The optical pulse source of claim 14 wherein the feedback circuit adjusts the shape of pulses passing through the filter to produce RZ pulses.

16. (Previously Presented) The optical pulse source of claim 14 wherein the light source comprises a distributed feedback laser.

17. (Previously Presented) The optical pulse source of claim 14 wherein the Bragg grating is coupled to the source by polarization maintaining optical fiber.

18. (Previously Presented) The optical pulse source of claim 14 wherein the Bragg grating comprises a fiber Bragg grating stabilized by disposition in a controlled temperature environment.

19. (Previously Presented) The optical pulse source of claim 14 wherein the Bragg grating is tunable.

20. (Previously Presented) The optical pulse source of claim 14 wherein the light source comprises a temperature adjustable distributed feedback laser and the feedback circuit comprises an electronic circuit responsive to the tapped signals for adjusting the temperature of the laser.

21. (Previously Presented) The optical pulse source of claim 14 wherein a wavelength response curve represents the optical transfer function of the grating and the wavelength λ of the light source is locked to an edge of the grating wavelength response curve.

U.S. Appl. No. 10/084,788
Docket No.: Eggleston 26-1-1-14
13401-994

22. (New) The optical pulse source of claim 11 wherein the Bragg grating and the tilted grating tap are in a single package.

23. (New) The optical pulse source of claim 14 wherein the Bragg grating and the fused fiber PM coupler are in a single package.